

Listing of Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

1. (original) A metal halide lamp comprising a substantially cylindrical discharge vessel (3) having an internal diameter $D_i < 2.0$ mm and filled with an ionizable filling, wherein two electrodes are present at a mutual distance E_A for maintaining a discharge in the discharge vessel, wherein the filling comprises an inert gas such as Xe having a pressure at room temperature between 5 and 25 bar, and an ionizable salt, characterized in that said ionizable salt is selected from the group comprising PrI_3 , NdI_3 and LuI_3 .

2. (original) A lamp according to claim 1, wherein said ionizable salt further comprises NaI, and wherein the molar ratio $\text{NaI}/(\text{PrI}_3 + \text{NdI}_3 + \text{LuI}_3)$ lies between 1.0 and 10.3.

3. (original) A lamp according to claim 2, wherein the molar ratio NaI/PrI_3 lies between 2.3 and 10.3, preferably between 3.0 and 5.7, and more preferably is approximately 3.5.

4. (previously presented) A lamp according to claim 1, wherein the amount of PrI_3 in the discharge vessel is between 10 and $335 \mu\text{mol}/\text{cm}^3$, preferably between 25 and $160 \mu\text{mol}/\text{cm}^3$, more preferably approximately $50 \mu\text{mol}/\text{cm}^3$.

5. (original) A lamp according to claim 2, wherein the molar ratio NaI/NdI_3 lies between 3.0 and 6.7, preferably between 3.6 and 4.8, and more preferably is approximately 4.2.

6. (previously presented) A lamp according to claim 1, wherein the amount of NdI_3 in the discharge vessel is between 8 and $301 \mu\text{mol}/\text{cm}^3$, preferably between 30 and $167 \mu\text{mol}/\text{cm}^3$, more preferably approximately $45 \mu\text{mol}/\text{cm}^3$.

7. (original) A lamp according to claim 2, wherein the molar ratio NaI/LuI_3 lies between 1.0 and 3.2, preferably between 1.2 and 1.8, and more preferably is approximately 1.4.

8. (previously presented) A lamp according to claim 1, wherein the amount of LuI_3 in the discharge vessel is between 15 and $414 \mu\text{mol}/\text{cm}^3$, preferably between 27 and $230 \mu\text{mol}/\text{cm}^3$, more preferably approximately $69 \mu\text{mol}/\text{cm}^3$.

9. (previously presented) A lamp according to claim 1, wherein $D_i < 1.5 \text{ mm}$.

10. (previously presented) A lamp according to claim 1, wherein EA lies between 3 mm and 7 mm.

11. (previously presented) A lamp according to claim 1, wherein the discharge vessel has a ceramic wall.

12. (previously presented) A lamp according to claim 1, wherein the discharge vessel is surrounded by a gas-filled outer bulb.

13. (previously presented) A lamp according to claim 1, wherein the lamp power lies between 20 W and 40 W.

14. (new) A metal halide lamp comprising a substantially cylindrical discharge vessel (3) having an internal diameter D_i

< 2.0 mm and filled with an ionizable filling, wherein two electrodes are present at a mutual distance EA for maintaining a discharge in the discharge vessel, wherein the filling comprises an inert gas such as Xe having a pressure at room temperature between 5 and 25 bar, and an ionizable salt selected from the group comprising PrI_3 , NdI_3 and LuI_3 , wherein the amount of NdI_3 in the discharge vessel is between 8 and 301 $\mu\text{mol}/\text{cm}^3$, preferably between 30 and 167 $\mu\text{mol}/\text{cm}^3$, more preferably approximately 45 $\mu\text{mol}/\text{cm}^3$.

15. (new) A metal halide lamp comprising a substantially cylindrical discharge vessel (3) having an internal diameter D_i < 2.0 mm and filled with an ionizable filling, wherein two electrodes are present at a mutual distance EA for maintaining a discharge in the discharge vessel, wherein the filling comprises an inert gas such as Xe having a pressure at room temperature between 5 and 25 bar, and an ionizable salt selected from the group comprising PrI_3 , NdI_3 and LuI_3 , wherein said ionizable salt further comprises NaI, and wherein the molar ratio $\text{NaI}/(\text{PrI}_3 + \text{NdI}_3 + \text{LuI}_3)$ lies between 1.0 and 3.2, preferably between 1.2 and 1.8, and more preferably is approximately 1.4.

16. (new) A metal halide lamp comprising a substantially cylindrical discharge vessel (3) having an internal diameter D_i < 2.0 mm and filled with an ionizable filling, wherein two electrodes are present at a mutual distance EA for maintaining a discharge in the discharge vessel, wherein the filling comprises an inert gas such as Xe having a pressure at room temperature between 5 and 25 bar, and an ionizable salt selected from the group comprising PrI_3 , NdI_3 and LuI_3 , wherein

the amount of LuI_3 in the discharge vessel is between 15 and $414 \mu\text{mol}/\text{cm}^3$, preferably between 27 and $230 \mu\text{mol}/\text{cm}^3$, more preferably approximately $69 \mu\text{mol}/\text{cm}^3$.